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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,007	11/29/2001	Ulrich Bley	DNAG 222 - PFF/JRC	5982

24972 7590 06/20/2003

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EXAMINER

FELTON, AILEEN BAKER

ART UNIT

PAPER NUMBER

3641

DATE MAILED: 06/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
10/030,007

Applicant(s)  
Bley et al

Examiner  
Aileen Felton

Art Unit  
3641



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jun 2, 2003
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above, claim(s) 20-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 6) ☐ Other:

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## **DETAILED ACTION**

### ***Election/Restriction***

1. Claims 20-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected groups and species (ball powder requiring a nitrocellulose binder), there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 9.

2. Applicant's election with traverse of the groups and species in Paper No. 9 is acknowledged. The traversal is on the ground(s) that the restriction is not proper. This is not found persuasive because the inventions listed as Groups I, II, and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features which defines over the prior art of record, see EP-543026. The species do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features which defines over the prior art of record, see EP-543026.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Objections***

3. Claim 13 is objected to because of the following informalities: In line 2 of claim 13, a comma appears after alkaline earth metal. It appears that Applicant intends the phrase "alkaline earth metal perchlorates" so this comma should be deleted. Appropriate correction is required.

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4. Claim 15 is objected to because of the following informalities: In line 2, “terphthalic” should be changed to “terephthalic”. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Cartwright et al(5,125,684).

Cartwright et al discloses a composition that comprises 45-80 % of oxidizer salt such as potassium perchlorate, 15-30 % of cellulose binder such as cellulose acetate, and 10-35 % of an organic fuel such as nitroguanidine. The combustion vapor contents that are free of nitrogen oxide and deficient in carbon monoxide are inherent properties of the composition of Cartwright et al. As to limitations which are considered to be inherent in a reference, note the case law of *In re Ludke*, 169 USPQ 563; *In re Swinehart*, 169 USPQ 226, *In re Fitzgerald*, 205 USPQ 594; *In re Best et al*, 195 USPQ 430; and *In re Brown*, 173 USPQ 685, 688.

7. Claims 11-14, and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamilton et al(4,214,438).

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Hamilton et al discloses a composition for use in an air bag device that comprises 5-95 % of an organic fuel and 5-95 % of an oxidizer. The fuel can be cellulose acetate which also functions as a binder. The oxidizer can be potassium perchlorate. Modifiers can be added to the composition such as aluminum oxide as a viscosity modifier and graphite fibers as burn rate modifier. The combustion vapor contents that are free of nitrogen oxide and deficient in carbon monoxide are inherent properties of the composition of Hamilton et al. As to limitations which are considered to be inherent in a reference, note the case law of *In re Ludke*, 169 USPQ 563; *In re Swinehart*, 169 USPQ 226, *In re Fitzgerald*, 205 USPQ 594; *In re Best et al*, 195 USPQ 430; and *In re Brown*, 173 USPQ 685, 688.

8. Claims 11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Wehrli(4,997,496).

Wehrli discloses a composition that comprise 30-45 grams of ascorbic acid, 55-70 grams of potassium nitrate, and a binder from 1-5 weight percent. The combustion vapor contents that are free of nitrogen oxide and deficient in carbon monoxide are inherent properties of the composition of Wehrli. As to limitations which are considered to be inherent in a reference, note the case law of *In re Ludke*, 169 USPQ 563; *In re Swinehart*, 169 USPQ 226, *In re Fitzgerald*, 205 USPQ 594; *In re Best et al*, 195 USPQ 430; and *In re Brown*, 173 USPQ 685, 688.

9. Claims 11 and 13-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Stark et al(5,525,170).

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Stark et al discloses a composition that comprises a maximum of 20 % of a metal oxide such as  $\text{Al}_2\text{O}_3$ , 20-45 % fumaric acid or cellulose acetate, and 55-80 % of potassium perchlorate. The cellulose acetate can function as both the fuel and the binder. The combustion vapor contents that are free of nitrogen oxide and deficient in carbon monoxide are inherent properties of the composition of Stark et al. As to limitations which are considered to be inherent in a reference, note the case law of *In re Ludke*, 169 USPQ 563; *In re Swinehart*, 169 USPQ 226, *In re Fitzgerald*, 205 USPQ 594; *In re Best et al*, 195 USPQ 430; and *In re Brown*, 173 USPQ 685, 688.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 11-15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cioffe(5,633,476).

Cioffe discloses a composition that comprises .5-15 % of potassium perchlorate, 30-50 % of an organic acid with the general formula  $\text{C}_6\text{H}_8\text{O}_6$  such as ascorbic acid, a binder such as cellulose acetate, and graphite as a coating. The combustion vapor contents that are free of nitrogen oxide and deficient in carbon monoxide are inherent properties of the composition of

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Cioffe. As to limitations which are considered to be inherent in a reference, note the case law of *In re Ludke*, 169 USPQ 563; *In re Swinehart*, 169 USPQ 226, *In re Fitzgerald*, 205 USPQ 594; *In re Best et al*, 195 USPQ 430; and *In re Brown*, 173 USPQ 685, 688. However, the amount of the binder is not disclosed.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the amount of the binder since Cioffe suggests that varying the proportions of the ingredients to control the properties and explosive characteristics of the composition.

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aileen Felton whose telephone number is (703) 306-5751. The examiner can normally be reached on Monday through Friday from 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306-4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

*Aileen B. Felton*  
Aileen B. Felton